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Remote Laboratory Access for Engineering Students via Robotics

Laboratory practices are an essential component in engineering higher education. However, during the Covid-19 pandemic, many students are unable to access the lab physically and miss the most important aspects of their education. In this study, we have developed the proof-of-concept remote lab at the University of Glasgow, which allow students to remotely control a robotic arm at University Laboratory to finish their lab experiments. Through this, we have successfully demonstrated the delivery of hands-on laboratory experience to our students. To the best of our knowledge, this is one of the first implementations of this idea in the higher education sector – especially in the transnational education sector.

Demo video: <https://youtu.be/RCR5I72HVuM>

Live demo: we are able to offer a live demo at the conference via Zoom.

access to laboratory facilities has been limited or nearly impossible